January 28, 1970

MONSANTO - Chemical Company Krummrich Plant, Sauget Industrial Waste Deep Well Injection

Dept, of Mines & Minerals 112 State Office Bldg. Springfield, 111. 62706 Attn: Mr. George Lane

Illinois Geological Survey 121 Natural Resources Bldg. University of Illinois Urbana, Illinois 61801 Attn: Dr. R.L. Bergstrom

illinois Water Survey P. O. Box 232 Urbana, 111. 61801 Attn: Mr. H. Smith

## Gentlemen:

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Ext. Clair Co The Monsanto Chamical Company conferred in this office January 22, 1970 regarding waste disposal problems at their Krummrich plant located near Sauget, Illinois. At that time they presented the attached document entitled "Proposal for Wastewater Injection Well at Monsanto Company, W. G. Krummrich Plant."

They noted that they considered this presentation as preliminary to the feasibility study of considerably more detail to be followed by final engineering plan documents if the project were feasible.

At this preliminary conference we of the Sanitary Water Board raised the question for further evaluation as to whether the geological fault lines in the Chester-St. Louis area would be of concern in this project.

Under the heading of "Characteristics of Wastewater" we received the following verbal listing under items No. 1 and 2 as follows:

- No. 1 The 85 percent acid would consist of sulphuric acid with a minor mixture of hydrochloric acid. The 15 percent organic was noted to be phenois and pentachlorophenolics.
- No. 2 The 85 percent water would include soluable inorganics, including 3 percent sodium chloride, plus sulfates and sulfides and some sodium carbonate. The 15 percent organic mixture would include some phenols, some chlorophenolics and some sulfanated benzine and benzine residues.

They advise they would be more specific in characterizing the wastewaters in the feasibility report.

It is to be noted that they are considering the use of the St. Peter sandstone,

the Roubidoux and the Bonneterre formations as possible disposal zones.

This report was compiled by a Mr. Michael A. Pierle, Civil Engineer at the Krummrich plant. They advised they had personnel of the Lyon Oil Company, Hydrocarbon Division of Monsanto, review the report and that they had received some encouragement from that group. They advised further that for a feasibility report they would have geologists do a thorough review of the geology, compatibility of wastes and other related items.

We advised the Monsanto Company they should contact the Illinois Geological Survey for available geological information on the area. We requested that they forward the well log information for the Lange #3 Well and the Asylum #2 Well to this office so that it could be forwarded to Geological Survey as background information. These two wells are in Missouri and it is assumed that the Kircheis Well near St. Jacobs and the Theobald Well near Columbia are of record with Geological Survey. If not, either Geological Survey or this office should request the logs from these wells also.

We understand there are some gas storage domes in this area of the State currently in use. This Board would want to be advised by the Department of Mines and Minerals as to whether this proposed deep well injection site could be a problem to these gas storage facilities.

Any major objections to the use of this general area for deep well injection which would stop the Company from further consideration of this method of disposal would be in order at this time. Also, any questions to be resolved by a feasibility report needing particular emphasis should be voiced at this time. Therefore, we request and will appreciate a review of this pre-feasibility study statement by Monsanto Chemical Company and the forwarding of your comments to this office.

Thanking you for your cooperation, we are

Very truly yours,

C. W. Klassen

Technical Secretary

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